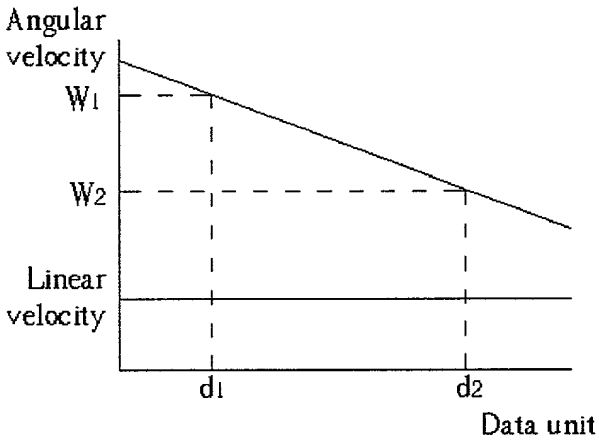

Fig. 1

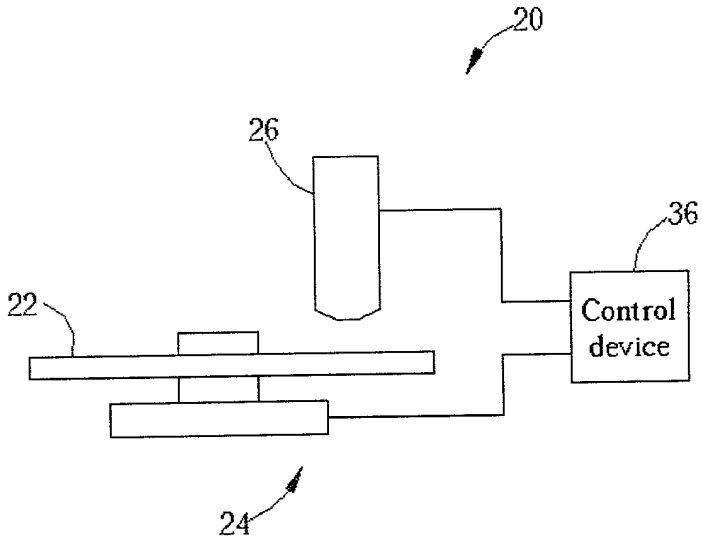

Fig. 2

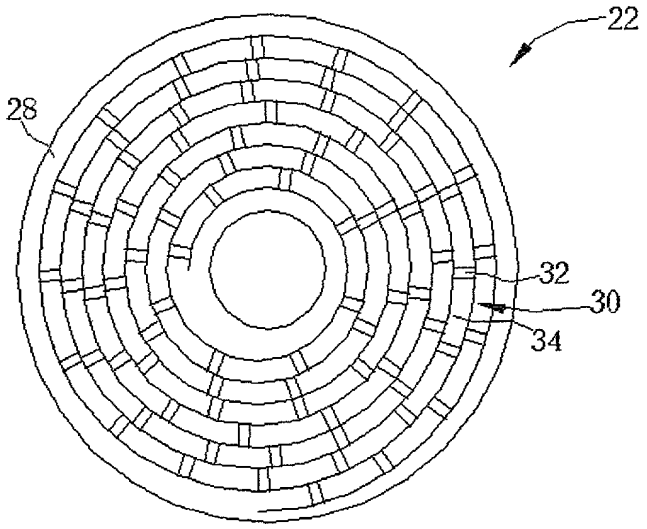

Fig. 3

Data block	Logic block address data	Linear velocity	Recording speed	Optical recording intensity
Z_1	$T_0 - T_1$	V_1	R_1	A_1
Z_2	$T_1 - T_2$	V_2	R_2	A_2
Z_3	$T_2 - T_3$	V_3	R_3	A_3
Z_4	$T_3 - T_4$	V_4	R_4	A_4

Fig. 4

Exhibit 1004 - 0019

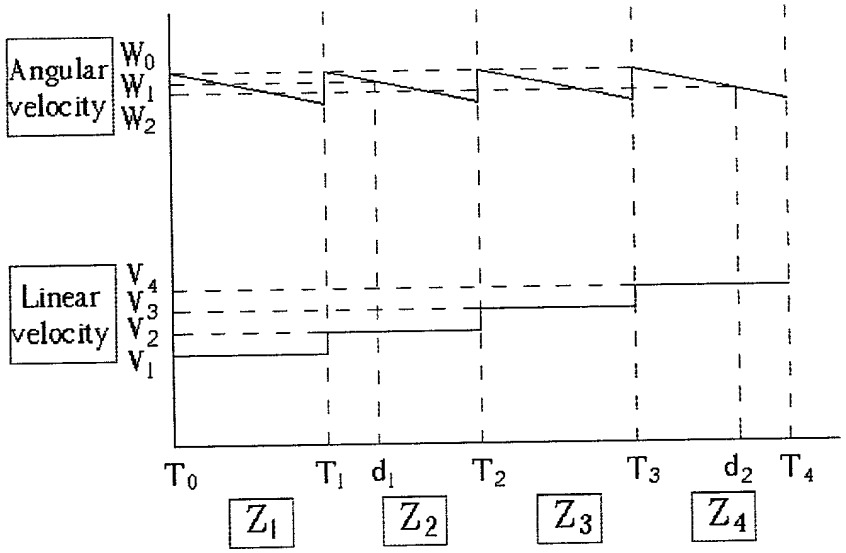
Angular velocity
W0
W1
W2
Linear velocity
V4
V3
V2
V1
T0
T1
d1
T2
T3
d2
T4
Z1
Z2
Z3
Z4

Fig. 5

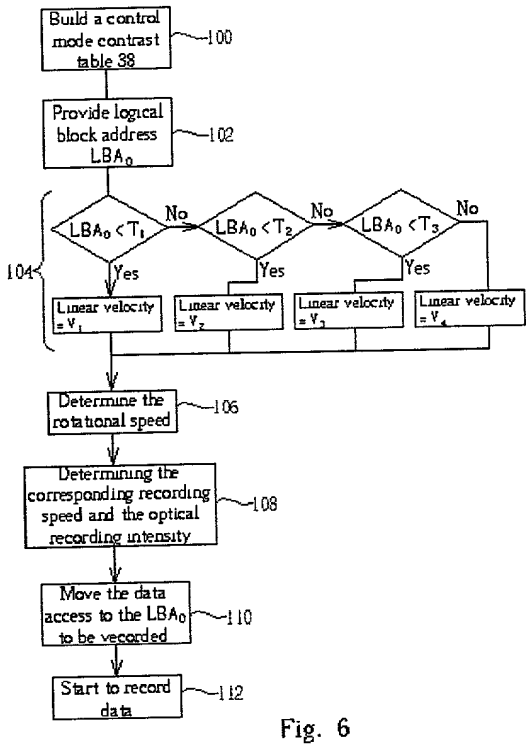
Build a control mode contrast table 38
100
Provide logical block address LBA0
102
LBA0 < T1
No
LBA0 < T2
No
LBA0 < T3
No
Yes
Yes
Yes
104
Linear velocity = V1
Linear velocity = V2
Linear velocity = V3
Linear velocity = V4
Determine the rotational speed
106
Determining the corresponding recording speed and the optical recording intensity
108
Move the data access to the LBA0 to be recorded
110
Start to record data
112

Fig. 6

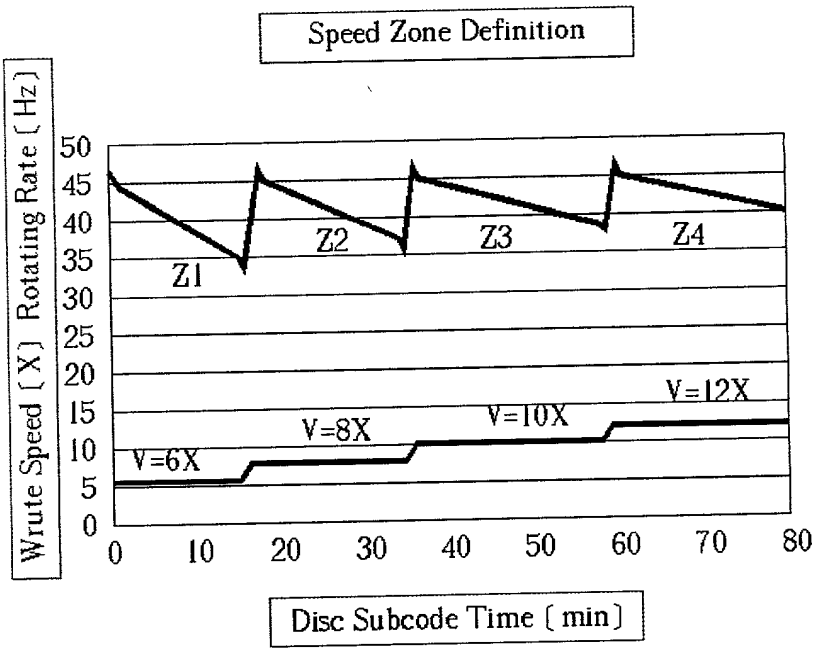
Speed Zone Definition
Wrute Speed〔X〕Rotating Rate〔Hz〕
50
45
40
35
30
25
20
15
10
5
0
Z1
Z2
Z3
Z4
V=6X
V=8X
V=10X
V=12X
0
10
20
30
40
50
60
70
80
Disc Subcode Time〔min〕

Fig. 7

	Constant linear velocity control (8X)	Four-stage linear velocity control (8-10X)
Temperature of the spindle wotor	60℃	41 ℃
Power consuming of the driver	4.3W	1.8W

Fig. 8